

Abstract

5 The invention relates to a radiation shielding arrangement  
for shielding high-energy neutron radiation and gamma  
radiation from high-energy particle accelerators or storage  
rings.

10 The radiation shielding arrangement according to the  
invention contains a shielding element made of water-  
containing material, for example with chemically bound  
water or water of crystallization, in particular gypsum.  
The water component of the material preferably makes up at  
least 5, 10 or 20 per cent by weight. The hydrogen nuclei  
15 or protons contained therein moderate neutrons in a  
virtually ideal manner because of the almost identical mass  
and the maximum pulse transformation associated with this.